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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,221	02/08/2005	Helmut Schwegler	10191/3500	4098
26646	7590	01/26/2006	EXAMINER	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			GANEY, STEVEN J	
			ART UNIT	PAPER NUMBER
			3752	
DATE MAILED: 01/26/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/524,221	SCHWEGLER ET AL.	
	Examiner	Art Unit	
	Steven J. Ganey	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-19 and 21-27 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/8/05 &amp; 8/15/05</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As disclosed the nozzle body is in the shape of a hollow cylinder and is made up of the nozzle-body inserts. The specification is silent to the embodiment where the nozzle body inserts have a rectangular cross-section and it appears that with such a limitation the nozzle body could not be in the shape of a hollow cylinder as disclosed.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 14-18, 22 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Arnold et al.

Art Unit: 3752

Arnold et al shows an atomizer nozzle in the shape of a hollow cylinder having spray-discharge orifices 30/40, at least one metering aperture 41; flow through openings 20/22, channels 13/28 and 26/39, and nozzle body inserts 10/25/35. Note external and internal threaded connections in Figure 1 and stepped bore hole in the nozzle body insert 10 at the entrance to threaded connection 11.

With respect to claim 15 and applicant's statement of intended use, i.e. (for feeding fuels into a chemical reformer), the device of Arnold et al is capable of performing applicant's intended use, therefore, the claims are fully anticipated.

5. Claims 14-17, 21, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Arnold et al.

Cerasi shows an atomizer nozzle in the shape of a hollow cylinder having spray-discharge orifices see Figures ¾ and col. 2, line 68 through col. 3, line 20, at least one metering aperture 19; flow through openings at 17 and 25, channels 16/26, 24/26 and 24/33, at least one additional spray orifice 32 in the axial direction, where the nozzle body has reduced wall thickness at in the axial profile at the elevation regions, see Figures 1 and 3 and nozzle body inserts 2/3/4/5.

With respect to claim 15 and applicant's statement of intended use, i.e. (for feeding fuels into a chemical reformer), the device of Cerasi is capable of performing applicant's intended use, therefore, the claims are fully anticipated.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al.

Arnold et al discloses all the featured elements of the instant invention, except for the connection means of the nozzle-body inserts, and the cross-sectional shape of the flow-through openings.

As to claim 19, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the nozzle body inserts of Arnold et al sealed by any one of the claimed connections since such connections are well known in the atomizer art and anyone of these connection would work and perform equally as well in the apparatus of Arnold et al.

As to claim 24, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flow through openings with one of rectangular or trapezoidal cross-sections since such modifications would depend on the flow rate desired in the nozzle.

Art Unit: 3752

*Allowable Subject Matter*

8. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Byles, Iwanowski and Grzych show various spray nozzles with radial spray.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Ganey whose telephone number is (571) 272-4899. The examiner can normally be reached on Monday, Tuesday, Wednesday, and Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (571) 272-4919. The fax phone number for this Group is (571) 273-8300.

sjg

1/23/06

  
STEVEN J. GANEY  
PRIMARY EXAMINER  
1/23/06